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to the Commissioner for Patents, Alexandria, VA 22313-1450 to fax number (571) 273-8300.	10/522,098		12/21/2005	
on February 5, 2007	First Named Inventor			
	George Henry Platt Brown			
Signature	Art Unit Examiner			
Typed or printed April Skovmand	2831		Chau N. Nguyen	
name				
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.				
This request is being filed with a notice of appeal.				
The review is requested for the reason(s) stated on the attached sheet(s).  Note: No more than five (5) pages may be provided.				
I am the				
applicant/inventor.		//	Signature	
assignee of record of the entire interest.	ν Κέ	vin J. Zilka		
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/98)	Typed or printed name			
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## **REMARKS**

The Examiner has objected to Claim 28 due to informalities. Applicant respectfully disagrees with such objection, asserts that it is not clear as to which instance of "said row" the Examiner is referring.

The Examiner has rejected Claims 28, 32, 36, 40, and 41 under 35 U.S.C. 102(b) as being anticipated by Sano et al. (U.S. Patent No. 5,109,456). Applicant respectfully disagrees with such rejection.

With respect to independent Claim 28, the Examiner has relied on Figure 4 from Sano to make a prior art showing of applicant's claimed "signal transmitting cable comprising a first signal transmitting portion including a plurality of elongate, flexible first signal transmitting members, wherein the first signal transmitting members of the first signal transmitting portion are surrounded by a first layer of resin material curable by means of radiation such that only the outermost signal transmitting members are in contact with said first layer, and said first signal transmitting members are arranged to form at least three rows, wherein for each said row containing a plurality of said members, said members are arranged such that neighbouring members of said row are in touching contact with each other, each recess formed by neighbouring members of a first said row facing towards a second said row accommodates a respective member of said second row, and said first layer is in touching contact with substantially all of the outward facing surface of the first signal transmitting portion."

In addition, in the latest Office Action mailed 8/3/2006, the Examiner has further argued that "Sano et al. teaches that high elastic wire material may be arranged in the gap among the gathered sub-units (col. 6, lines 34-39).

Applicant respectfully disagrees and asserts that the invention defined by Claim 28 of the present application differs from the disclosure of Sano in that, in the present invention, only the outermost signal transmitting members are in contact with the first

layer, whereas the secondary coating 25 penetrates the interstices between the sub units 22 in Sano. This can be seen in Figure 4 of Sano in which the shading representing the secondary coating 25 can be seen to the left and right of the innermost sub unit 22. Also, the text of Sano at column 5, lines 36 to 38 states that the secondary coating 25 is applied on the seven sub units 22. This means that the ultraviolet setting resin 25 must also be applied to the innermost sub-unit, as a result of which it is impossible for only the outermost sub units 22 to be in contact with the secondary coating 25. As a result, Sano does not disclose an arrangement in which only the outermost signal transmitting members are in contact with the first layer, and it is therefore submitted that Claim 28 is novel in view of Sano.

As a result of this difference, the signal transmitting cable of the present invention has the advantage over the arrangement of Sano that the cable is provided with sufficient stiffness, while still allowing sufficient axial sliding of the signal transmitting members relative to each other in order to minimize the application of stress to signal transmitting members (which may include fragile optical fibers) when the cable is bent. This significantly improves the speed at which the cable can be installed in a duct by means of blowing using compressed air. A further benefit of leaving the internal interstices free from any radiation curable resin is that since UV light is typically used to cure such materials, if the internal interstices include radiation curable resin, then the UV light used to cure the resin may fail to penetrate all of the internal interstices, particularly in the case of arrangements in which there are a large number of signal transmitting members. In that case, partially cured or uncurred resin can lead to the formation of gases which can be detrimental to the long term life of the signal transmitting members individually, and to the signal transmitting cable as a whole.

Sano does not recognize the existence of the first problem, i.e. that excessive stresses can be applied to the signal transmitting members on bending the cable if the radiation curable material is in contact with all of the signal transmitting members. Sano also does not recognize the existence of the second problem, i.e. that the presence of radiation curable material in the internal interstices between the signal transmitting

members can give rise to uncured or partially cured material, which in turn can have a detrimental effect on the long term performance of the cable. This is further illustrated by the passage at column 6, lines 14 to 18 of Sano, which states that a low viscosity resin is useful as the material of the secondary coating, because it flows into gaps among sub units. This therefore not only encourages the skilled person to use a material which will flow into the internal interstices between the sub units, but also makes it difficult for the person skilled in the art to make an arrangement in which only the outermost sub units are in contact with the secondary coating because of the low viscosity of the material used. Sano therefore gives no incentive to the person skilled in the art to try to prevent the formation of gas as a result of the existence of uncured or partially cured resin material in the interstices between the signal transmitting members.

Furthermore, applicant respectfully asserts that independent Claim 41 also claims that "only the outermost signal transmitting layers are in contact with said first layer."

Thus, Claim 41 is also not met by Sano for at least the reasons argued above.

The Examiner is reminded that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. Of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, the identical invention must be shown in as complete detail as contained in the claim. *Richardson v. Suzuki Motor Co.* 868 F.2d 1226, 1236, 9USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim.

This criterion has simply not been met by the above reference, as noted above. Thus, a notice of allowance or a proper prior art showing of <u>all</u> of applicant's claim limitations, in combination with the remaining claim elements, is respectfully requested.

In addition, applicant respectfully asserts that none of the other prior art cited in the office action discloses a signal transmitting cable in which only the outermost signal transmitting members are in contact with the first layer of radiation curable resin material. Thus, even if a person skilled in the art were to seek a solution to the problem of gas formation in any of the other prior art, no solution would be found. Accordingly, the person skilled in the art would not be able to combine the teachings of Sano with that of any of the other prior art to arrive at the present invention. It is therefore submitted that the present invention as defined by independent Claims 28 and 41 involves an inventive step not present in the prior art.

Thus, all of the independent claims are deemed allowable. Moreover, the remaining dependent claims are further deemed allowable, in view of their dependence on such independent claims.

In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at (408) 505-5100. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 50-1351 (Order No. UDL1P017).

Respectfully submitted,

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